

PROCESS FOR PREPARING COMPOSITE MOLDED ARTICLES BY
MULTICOMPONENT INJECTION MOLDING

ABSTRACT OF THE DISCLOSURE

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A process for producing a composite molded article is described. The composite molded article includes: (i) at least one base body (1) having a contoured surface; (ii) at least one first thermoplastic part (4, 5, 6); and (iii) at least one second thermoplastic part (2, 3), each of the first and second thermoplastic parts being joined to the base body. The process includes, (a) providing a multicomponent injection molding tool (20) having at least two separate melt flow-way systems and at least two cavities in which each of the first and second thermoplastic parts are separately formed, each of the cavities are in separate communication with each of the separate melt flow-way systems. The base body is placed into the molding tool in a second step (b). The cavities of the mold are separated from each other by a combination of the contoured surface of the base body and sealing edges of the molding tool that abut the contoured surface of the base body. In a third step (c), a thermoplastic material is injected simultaneously into each of the cavities by means of the separate melt flow-way systems. The first and second thermoplastic parts (ii) and (iii) each become joined to the base body (i) during injection molding step (c). In a final step (d), the composite molded article is removed from the molding tool.

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